

Lab #: 641272 Job #: 36848 IS-99404 Co. Job#:
 Sample Name: L.A. Smith #2 (SN #218464) Co. Lab#:
 Company: Approach Environmental, LLC Cylinder: 2017
 API/Well:
 Container: Cylinder
 Field/Site Name: LDNR Emergency Gas Sampling
 Location:
 Formation:
 Sampling Point:
 Date Sampled: 11/29/2017 10:45 Date Received: 12/06/2017 Date Reported: 1/18/2018

Component	Chemical mol. %	$\delta^{13}\text{C}$ ‰	δD ‰	$\delta^{15}\text{N}$ ‰
Carbon Monoxide -----	nd			
Helium -----	0.0253			
Hydrogen -----	nd			
Argon -----	nd			
Oxygen -----	nd			
Nitrogen -----	1.55			
Carbon Dioxide -----	0.010			
Methane -----	93.68	-37.18	-149.0	
Ethane -----	2.56	-25.98		
Ethylene -----	nd			
Propane -----	0.925	-25.48		
Propylene -----	nd			
Iso-butane -----	0.247			
N-butane -----	0.316			
Iso-pentane -----	0.172			
N-pentane -----	0.137			
Hexanes + -----	0.378			

Total BTU/cu.ft. dry @ 60deg F & 14.73psia, calculated: 1068

Specific gravity, calculated: 0.605

nd = not detected. na = not analyzed. Isotopic composition of hydrogen is relative to VSMOW. Isotopic composition of carbon is relative to VPDB. All gas component carbon isotope values are reported on a scale defined by a two point calibration of LSVEC and NBS 19. Calculations for BTU and specific gravity per ASTM D3588. Chemical compositions are normalized to 100%. Mol. % is approximately equal to vol. %.